

## ABSTRACT

A high contrast twisted nematic liquid crystal cell in which outgoing or reflected light is linearly polarized and has the same polarization angle as incoming or incident light when the cell 5 is in an off state. Matching the polarization axes of incoming and outgoing light allows less light to pass through a final analyzer with the cell in an off state to provide a darker off state, and allows more light through with the cell in an on state, resulting in an enhanced contrast ratio display. A method of determining placement of optical retarders for enhanced contrast in a reflective twisted nematic liquid crystal display device is also described.

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